



INSTALLATION & OPERATION

IMPORTANT FOR FUTURE REFERENCE

Please complete this information and retain this manual for the life of the equipment:

Model #: _____

Serial #: _____

Date Purchased: _____

COUNTER STEAM ELECTRIC

AUTO FILL, MANUAL DRAIN

CSE-4 & CSE-6



Model CSE-4

⚠ WARNING

Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

CROWN FOOD SERVICE EQUIPMENT

A Middleby Company

70 Oakdale Road, Downsview (Toronto) Ontario, Canada, M3N 1V9

Telephone: 919-762-1000

www.crownsteamgroup.com



SAFETY PRECAUTIONS

Before installing and operating this equipment, be sure everyone involved in its operation is fully trained and aware of precautions. Accidents and problems can be caused by failure to follow fundamental rules and precautions.

The following symbols, found throughout this manual, alert you to potentially dangerous conditions to the operator, service personnel, or to the equipment.



This symbol warns of immediate hazards that will result in severe injury or death.



This symbol refers to a potential hazard or unsafe practice that could result in injury or death.



This symbol refers to a potential hazard or unsafe practice that could result in injury, product damage, or property damage.



This symbol refers to information that needs special attention or must be fully understood, even though not dangerous.

IMPORTANT NOTES FOR INSTALLATION AND OPERATION

WARNING

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

WARNING

FOR YOUR SAFETY:

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

WARNING

Improper installation, operation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operating and maintenance instructions thoroughly before installing, operating, or servicing this equipment.

NOTICE

This product is intended for commercial use only. NOT FOR HOUSEHOLD USE.

NOTICE

This manual should be retained for future reference.

IMPORTANT

The information contained in this manual is important for the proper installation, use, and maintenance of this steamer. Adherence to these procedures and instructions will result in years of trouble-free service.

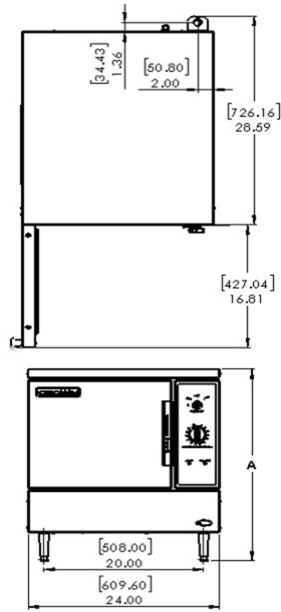
Please read this manual carefully and retain it for future reference.

ERRORS: Descriptive, typographic, or pictorial errors are subject to correction. Specifications are subject to change without notice.

RETAIN THIS MANUAL FOR FUTURE REFERENCE.

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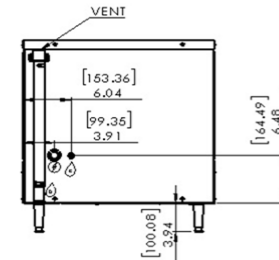
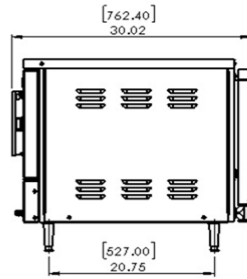
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SERVICE CONNECTIONS
 ⚡ - ELECTRICAL CONNECTION: \varnothing 1 1/8" (29 mm) hole for electrical connection. Rating to be specified on data plate.
 💧 - COLD WATER: 1/2" NPT
 🚰 - DRAIN: 1" NPT

MODEL	A (INCHES)
CSE-4	26.55
CSE-6	33.05

Dimensions- Inches [mm]



ELECTRICAL CHARACTERISTICS

MODEL	KW	AMPS/POWER						
		208V		220V		240V		480V
		1 PH	3 PH	1 PH	3 PH	1 PH	3 PH	3 PH
CSE-4	9.8	47.1	27.2	44.5	25.7	40.8	23.6	11.8
CSE-6	9.8 15.8	47.1 N/A	27.2 44.0	44.5 N/A	25.7 41.5	40.8 N/A	23.6 38.0	11.8 19.3

COMPARTMENT PAN CAPACITY AND WEIGHT

MODEL	PAN DEPTH			
	1"	2-1/2"	4"	6"
CSE-4	8	4	2	1
CSE-6	12	6	4	2

MODEL	SHIPPING WEIGHT
CSE-4	160 lbs.
CSE-6	180.5 lbs.

WATER QUALITY STATEMENT

Water is the essential ingredient in steam equipment, water quality is the major factor affecting the performance of your appliance. Crown Steam Group offers a Comprehensive Water Treatment System as an option (at additional cost) which exceeds our minimum water requirements. Proof of installation and proper cartridges replacement is required for warranty coverage. Water supply to Crown Steam Group steamers must be within these guidelines.

Total dissolved solids.....	Less than 60 PPM	Chlorine	Less than 1.5 PPM
Total alkalinity	Less than 20 PPM	pH Factor	6.8 - 7.3
Silica.....	Less than 13 PPM		

Water which does not meet these standards should be treated with the installation of Middleby's Water Treatment System. Call 919-762-1000 if you have questions concerning your water meeting these parameters.

*Failure or malfunction of this appliance due to poor water quality is not covered under warranty.
 Reference www.crownsteamgroup.com for complete warranty details and instructions.

DISCLAIMER

Terry System Cartridge Changes / Installation – "2-3 gallons of water MUST be purged at each cartridge change or new installation prior to water supply being fed to the steamer. Failure to do so can result in component damage within the steamer which is not covered under warranty. For additional guidance on proper installation, refer to install documentation provided with each Terry System and Replacement Cartridge Set."

NOTES

- Each single compartment has one rear drain connection.
- 4" clearance right mandatory, left and rear side recommended.
- Location near a floor drain is recommended
- Refer to electrical characteristics for voltage requirements of each steamer.
- Each compartment requires separate electrical & water connection.

As continued product improvement is a policy of Crown, specifications are subject to change without notice.

INTRODUCTION

This manual contains general information, installation, operation, principles of operation, troubleshooting guide and maintenance information for CSE Counter Steamer Electric.

Description

Congratulations on purchasing the Crown CSE. The CSE is a single compartment countertop or two compartment floor model steamers featuring pressureless steam cooking, a circulating fan inside the cooking chamber to speed cooking and an automatic waterfill mechanism. CSE also features a clean water reservoir system and equipped with 300 series stainless steel chamber with coved corners.

CAUTION

Do not use utensils, steel wool, or other harsh abrasives to clean your steamer.

Safety Features

As with any cooking process, or with any piece of commercial cooking equipment, there are potential hazards to both the operator and the piece of equipment if care is not taken. In designing the CSE steamer, safety features have been built in to protect against many of these potential hazards, but **TRAINING OF EACH OPERATOR AND CAREFUL ADHERENCE TO ALL WARNINGS ARE NECESSARY TO ENSURE THE SAFETY OF USERS.**

1. Diagnostic sensor shut-off: The thermostat controller has a built-in diagnostic feature that will automatically shut down all heaters if the sensor probe fails, which will avoid overheating.
2. High Limit shutoff: If the steamer runs dry the heaters will shut down.
3. Overflow: An overflow pipe incorporated into the reservoir drain allows water to flow out the back drain of the steamer in case of a waterfill malfunction.

WARNING

Failure to keep the overflow outlets clear and unobstructed may result in hot water flowing out the door of the steamer. A blocked overflow and drain could allow water to flow to the countertop or floor, which can cause slippery conditions. Modifying the steamer to operate with the overflow pipe blocked could cause dangerous situations and will void the warranty.

4. High water sensor: Water level sensor is located on the lower backside of the steamer. The sensor activates the waterfill mechanism and will shut off water flow if an overflow situation occurs. It is important that sensor is kept clean so that the stainless part is shiny.
5. Door open safety switch: There is a safety switch built into the door frame that shuts down heaters, fan and lights when the door is opened. Once the door is closed, all functions return. **THE DOOR MUST BE FIRMLY CLOSED IN ORDER FOR THE STEAMER TO FUNCTION. IF STEAM IS ESCAPING, DOOR IS NOT PROPERLY SHUT AND MAY AFFECT COOK TIMES, PRODUCT QUALITY AND WATER CONSUMPTION.**

WARNING

Failure to keep water level sensor clean may result in hot water flowing out the overflow or the front door of the steamer.

6. Time delay relay: The steamer has two timers built into the electrical system to shut down should the water level system fail. When the steamer is first turned on and the reservoir is empty two countdown timers will begin to count. If it takes longer than 60 seconds for the level of the water to come into contact with the water sensor probe, the heaters and the heating light will turn off. After the water comes in contact with the probe the heat and heating light will come back on.

Dimensions

- 4-pan: External dimensions are 24" wide x 22.5" high (plus 4"-6" adjustable legs) x 28" deep (plus vent pipe).
- 6-pan: External dimensions are 24" wide x 29" high (plus 4"-6" adjustable legs) x 28" deep (plus vent pipe).

Service Contacts

Should repairs be required, a network of authorized agencies is available to assist with prompt service. A current Directory of Authorized Service Agencies may be obtained by contacting the factory.

Telephone: 919-762-1000 www.crownsteamgroup.com

INSTALLATION

Unpacking

IMMEDIATELY INSPECT FOR SHIPPING DAMAGE

Immediately after unpacking the steamer, check for possible shipping damage. If the steamer is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

Reporting shipping damage is the responsibility of the purchaser. Do not discard packaging if filing a freight damage claim. Upon receipt of steamer immediately inspect the exterior of packaging for damage. Remove wrapping. Inspect the exterior of the CSE for visible shipping damage.

Prior to installation, verify that the electrical service agrees with the specifications on the machine data plate which is located on the left side panel.

Unpacking / Removal from Pallet: To remove the steamer from the pallet, carefully cut the strapping.

Make sure the pan racks and water reservoir cover installed inside the steamer have not become dislodged during shipping.

INSTALLING LEGS

Install 4 legs (shipped inside the steamer) into the threaded mounting holes located on the base of the unit.

LOCATION

The installation location must allow adequate clearances for servicing and proper operation. Allow space for plumbing and electrical connections. 98% of all maintenance and service can be done from the front or right side. Some local codes may require installation under ventilation, but ventilation is not required in most cases. A minimum of 4" clearance from adjacent equipment on the left side and rear is recommended.

VENTING

Vent pipe installation: Steamers come with the vent piping in rear of unit completely assembled. **DO NOT BLOCK VENT PIPE.**

Some local codes may require the steamer to be located under an exhaust hood. Information on the construction and installation of ventilating hoods may be obtained from Vapor Removal from Cooking Equipment, NFPA standard No. 96 (latest edition).

ELECTRICAL CONNECTIONS

Electrical Hookups: The access hole to electrically wire your steamer is located in the bottom left corner (facing the back of the steamer) on the rear panel. Your electrician may install a cord set to make the steamer more portable or the unit may be hard-wired. Please follow local codes when installing the cord set.

Electrical grounding must be provided in accordance with local codes or in the absence of local codes, with the National Electrical Code, ANSI/NFPA70, or the Canadian Electrical Code, CSA C22-2, as applicable.

WARNING

Disconnect electrical power supply and place a tag at the disconnect switch to indicate that you are working on the circuit.

NOTICE

A qualified electrician must perform all electrical hookups and meet all local codes.
Installation is the responsibility of the purchaser.

Electrical Diagrams: The electrical diagrams are located on the inside of the right side access panel.

NOTICE

Stacked units will require 2 separate electrical connections.

Water and Drain Connection

Water Hookup: Steamer requires 1/2" water line. Termination is 3/4" male garden hose connection. Make sure waterline is flushed to remove grit and soldering particles prior to connecting steamer. Dirty water lines may affect solenoid operation.

Double (stacked) compartment steamers require separate water connections, which may be manifolded. Inadequate water supply may cause one steamer not to fill properly when both steamers are turned on at the same time. If that happens turn on one steamer a few minutes after the first.

Appliance is to be installed with backflow prevention in accordance with applicable federal, province and local codes.

Do not connect to de-ionized water. Probe will not sense the level of the water. Recommended water pressure is 30 – 35 lbs.

CAUTION

Flush incoming water line prior to connecting to steamer. Debris in water lines may cause solenoid valve to malfunction. If solenoid valve is stuck open water must be turned off at the source.

Recommended Water Quality: Untreated water contains scale producing minerals which can precipitate onto the surfaces in the boiler. Due to the temperatures in the boiler, the minerals can be baked onto the surfaces and components. This can result in early component failure and reduced product life.

Mineral scale components cause several problems:

1. The surfaces of the heating devices become coated with scale, reducing the heat transfer efficiency. This can produce hot spots on the heating elements and result in premature failure.
2. The water level probes become coated with scale. Scale will bridge across the probe insulator from the metal extension which senses the water level in the boiler cell. Once this scale becomes wet, the water level control is unable to maintain the proper water level in the boiler. This situation may cause an electric heating element to fail if the element is not adequately covered by water.

Strainers and filters will NOT remove minerals from the water.

Refer to Service Connections in this Manual for the recommended water quality criteria.

NOTICE

Water level probe will not sense water level if steamer is connected to a de-ionized water or reverse osmosis system.

Rear Drain: Make sure the 1" rear drain is plumbed to a floor trough or air gap drain. Customer supplies plumbing. However, one 90° elbow is shipped with the steamer to be used as needed.

The drain piping must consist of temperature resistant material, greater than 160°F, and be of adequate diameter not to cause flow restriction. Improper materials may deform and cause restrictions, thus affecting performance.

WARNING

The water may be very hot. It is advisable to allow the water to cool down before draining. Leaving the door open will aid cooling.

Overflow Pipe: An overflow is incorporated into the reservoir drain allows water to flow into the drain line out the back of the steamer in case of a waterfill malfunction.

 **WARNING**

Failure to keep the overflow pipe and drain pipe clear and unobstructed may result in an unsafe condition.

Middleby TruH20 water filtration system: This equipment comes with optional Middleby TruH20 water filtration system (at additional cost). Please note that an initial flushing procedure for the filtration system must be performed before hooking the system to the unit. Please check out the connection diagram given with the system for any queries.

The cartridges should be replaced every six months or more often if the needle on the flow gauge enters the red area (below 10 PSI). Cartridge life depends greatly upon the quality of water. **For replacement cartridges call 480-591-4073.**

LEVELING

Once the legs have been installed and the steamer has been placed in its final location, the unit must be leveled. This is done by turning the base of the leg. Use the top of the steamer casing as a reference. It is recommended to use a level to ensure proper installation

 **WARNING**

The steamer must be level in order for the water sensor and overflow outlet to function properly.

Rack Installation

Two pan support racks have been included with the steamer. Both racks are identical; there is no specific left or right side rack. To install, position a rack inside the cooking chamber and align the mounting hooks with the 3 pre-installed screws at the top and bottom of the cooking chamber wall. Repeat this process for the rack mounted on the other side. These racks are designed to be removed easily for cleaning.

Testing and Inspection

Once your steamer is in place and properly leveled, plumbed, and wired, test unit to make sure it is functioning properly.

Startup Procedure

1. Make sure the water line is flushed prior to connecting steamer.
2. Make sure water is connected and supplied to the steamer.
3. Using a soft sponge and mild detergent, wipe out the interior of the cooking chamber to remove shipping debris prior to use. Rinse with clean water.

 **WARNING**

Do not use any abrasive cleaners, utensils, or scrubbers. Use vinegar and water to clean reservoir. Nylon bristle brushes or soft sponges are recommended.

CSE - ELECTRIC BOILERLESS CONVECTION STEAMER

4. Install reservoir cover with back drain fitted into the hole at back of steamer – slide cover to insert drain fitting into drain hole. Lip at front of reservoir cover fits over base of door opening.
5. **Power On/Heat Up:** Make sure the door is closed, then turn the cooking mode selector to the 1 position. The Amber HEATING light on the bottom left corner of the control panel will turn on. You may smell smoke from oils left from manufacturing – don't be alarmed, they will burn off quickly. When the HEATING light goes out (it takes less than 25 minutes) you are ready to test the steamer.
6. Turn the cooking mode selector switch to the 2 position. The HEATING light will go on as heat is called for. You may open the door and inspect the steaming process (note that the HEATING light goes out and the heaters are returned off when the door is opened).
7. To shut down your steamer, turn the cooking mode selector to the OFF position (ø).
8. **Drain Steamer:** Make sure that the drain line exiting from the rear of the steamer is plumbed either to a floor trough or air gap drain. To drain, turn the drain valve handle 90 degrees.

OPERATION

Operating Information

Electrical Connection: Make sure unit is plugged into a proper receptacle or wired properly and the breaker for the circuit is on.

Water Connection: Make sure the steamer is properly connected to a water source. Do not connect the unit to de-ionized water; the water probe will not sense the water level. Make sure the water lines are open.

Automatic Waterfill: Water will be added to the steamer as needed periodically and it should not run dry until turned off and manually drained.

Clean Probe Indicator: If the red CLEAN PROBE indicator comes on and stays on the system has detected a fault and will shut down the heaters until the fault has been cleared. Most commonly, this requires cleaning the water sensor probe.

CAUTION

Do not manually refill hot, dry reservoir with cold water. Damage to the interior may result if cold water is added to a hot, dry reservoir.

Power On / Heat Up: Make sure the door is closed then turn the cooking mode selector switch to the desired setting, 1, 2 or 3. The steamer will begin warming up. The Amber colored HEAT light will turn on and remain on until the pre-heating is completed. Throughout the cooking process the HEAT light will come on periodically whenever the heaters are on.

CAUTION

If the door is open, nothing will happen. Close the door and the steamer will turn on and begin warming up.

Door Operation: The door must be closed at all times while cooking. If the door is opened during cooking, the heaters will shut down and the Amber HEAT light will go off until the door is closed. You may open the door at any time to check the progress of cooking, stir product and add or remove cooking pans. If the door handle is loose the door is not firmly shut; re-shut the door by slamming firmly.

Pan Combinations: The CSE steamer accommodates 4" and 6" deep pans. However, for best steam cooking performance 1" or 2 1/2" deep pans work best. See page 4.

Cooking: When ready to cook turn the cooking mode selector dial to the desired setting.

NOTICE

If starchy food products (potatoes, pasta) cause water to get frothy add 2 tablespoons of cooking oil to the water to control foaming.

Setting	Temperature	Use for
1	180°	Green vegetables, delicate egg dishes, and seafood for higher yield. Cook times will be slower than steaming.
2	212°	Steam Cooking
3	230° Steam Plus Radiant Heat	Heavy dense foods like meat or potatoes.

Shut down, draining and cleaning of steamer.

- Shut Down:** To shut down the steamer at the end of the day just turn the cooking mode selector dial to e (OFF).
- Water reservoir draining:** To drain, turn the drain valve handle 90 degrees.

⚠ WARNING

The reservoir water may still be hot. It is advisable to let the water cool down prior to cleaning.

NOTICE

Opening the steamer door will speed the cooling process. It is also advisable to leave the steamer door open when not in use. This will lengthen the life of the door gasket.

Steam Cooking Guidelines

COOKING WITH ATMOSPHERIC / PRESSURELESS STEAM

- Atmospheric or pressureless steaming is perfect for a la carte cooking. The door can always be opened during cooking to add or remove pans of food, to season food or to check on its progress.
- Multiple products can be cooked at one time because there is no crossover of cooking flavors in atmospheric steam.
Large and small portions of food can be cooked at the same time.
- Less attention is required to cooking foods and overcooking is rare.

Recommended Uses

A La Carte	Preserving	Stewing
Thawing	Blanching	
Simmering	Poaching	

Typical Foods

Casseroles, Fresh or Frozen	Vegetables, Fresh or Frozen	Seafood, Fresh or Frozen
Desserts	Pasta	Rice
Fruits	Potatoes	Cereals
Eggs	Meats	Poultry
Prepared Foods	Sauces	And Much More

Tips On Cooking Frozen Product

- Preheat cooking compartment.
- Break up frozen vegetables or product, if possible.
- If product is an ice block, set it in the pan on its narrowest side. This allows the steam to contact a greater surface area.
- Thawing is faster and better for the food in atmospheric steaming.
- Make sure frozen product is uniform in size to get best results.
- Season vegetables AFTER steaming.
- Less seasoning is required because steaming preserves natural flavors.
- Shallower pans will allow faster cooking times.

Blanching

Many foods can be blanched in atmospheric steam before being finished in ovens, fryers, or on grills and griddles. This reduces total cooking time, helps ensure complete cooking and a moist product. Potatoes, poultry, and seafood are excellent examples. Blanching before frying reduces grease absorption by food products.

Tips On Pan Use

- For faster cooking times, 2 1/2" deep perforated pans are recommended.
- It is not necessary, and we do not recommend covering most pans of product. When cooking with only one pan, place it in the center of the cooking chamber.
- Use solid pans where appropriate: scrambled eggs, rice, beans, dehydrated foods, prepared casseroles, sauces, cake, or other desserts (you can bake a cake in atmospheric steam), and when you want to prevent food from dripping on a lower pan.
- When cooking proteins (meat, poultry, or seafood) use a solid catch pan under the perforated pan. Accumulated juices can be used for soup stock, gravy, or broth.
- Protein foods (meat, poultry, or seafood) can be cooked in perforated or solid pans. If you are batch-cooking protein foods use perforated pans and place a solid pan on the bottom rail. All the juices will then accumulate in this pan for later use and to keep them out of the water reservoir.
- When atmospheric steaming, a pan cover can increase the cooking time up to 400%. Items such as frozen casseroles, meat loaf, or sauces can be covered to avoid excess condensation.
- Root vegetables should be steamed in a perforated pan.
- Eggs can be hard cooked out of the shell and then chopped to avoid peeling shells.
- Always cook potatoes in perforated pans. This allows steam to circulate properly.

Other Helpful Hints

- Got a tough cleaning problem, pot, pan, utensil? Put it in your steamer to loosen burned-on food; it makes washing much easier.
- Stale or frozen bread can be thawed or renewed in your steamer.
- Allow adequate spacing between pans for even steam circulation. Your pan rails and the shape of the steamer walls are designed to maximize steam flow. Do not try to load more than the rack is designed for. Maximum capacity loads cook best with perforated pans.
- Loosely packed pans will cook faster than tightly packed pans.
- To skin tomatoes, oranges etc. more easily, steam for a short time, then chill in cold water.
- When steaming pasta, shrimp, or ground meat, nesting a perforated pan in a solid pan works well. Lift out the perforated pan to drain.
- Never have the water high enough or a pan low enough to touch water. Allow enough space for steam circulation. Steam has 6 times more energy than boiling water – use the steam to cook.
- When possible, cook in two shallow pans instead of one deeper pan – it cooks faster, and you avoid bruising the product.
- If using 1/2 size or smaller pans on one level, with different products, load the faster cooking items last, this will make unloading easier.
- In steam cooking, load size has little effect on the cooking time. For the highest efficiency cook with full loads.
- Pre-cook roasts, especially fat-encrusted roasts, in steam for 1/3 of their cooking time, then place in oven. Juices are sealed in, there is more flavor, more nutrients are retained and the roast shrinks less.
- Cook whole poultry the same way, only cook it until it is nearly completed and allow just enough time in the oven to finish and brown.

Warnings & Cautions

Warnings

- Failure to keep the overflow outlets clear and unobstructed may result in hot water flowing out the door of the steamer. A blocked overflow and drain could allow water to flow to the countertop or floor, which can cause slippery conditions. Modifying the steamer to operate with the overflow pipe blocked could cause dangerous situations and will void the warranty.
- Failure to keep water level sensor clean may result in hot water flowing out the rear overflow or the front door of the steamer.
- A qualified electrician must perform all electrical hookups and meet all local codes. Installation is the responsibility of the purchaser.
- Failure to keep the overflow pipe and drain clear and unobstructed may result in an unsafe condition.
- The steamer must be level in order for the water sensor and overflow outlet to function properly.
- The reservoir water may still be hot. It is advisable to let the water cool down prior to draining.
- The cooking chamber is designed to retain heat. It may still be hot to the touch when cleaning. Wear protective gloves or wait for the surface to cool before cleaning. Do not add cold water to a hot empty cooking chamber until the unit has cooled down or damage may result.

Cautions

- Do not use utensils, steel wool, or other harsh abrasives to clean your steamer.
- Flush incoming water line prior to connecting to steamer. Debris in water lines may cause solenoid valve to malfunction. If solenoid valve is stuck open water must be turned off at the source.
- Do not use any abrasive cleaners, utensils, or scrubbers. Use vinegar and water to clean the reservoir. Nylon bristle brushes or soft sponges are recommended.
- Do not manually refill hot, dry reservoir with cold water. Damage to the interior may result if cold water is added to a hot, dry reservoir.

MAINTENANCE

Cleaning Guidelines

WARNING

Disconnect the power supply to the appliance before cleaning or servicing.

CAUTION

Live steam and accumulated hot water in the compartment may be released when the door is opened.

CAUTION

The appliance and its parts are hot. Use care when operating, cleaning and servicing the appliance.

Daily Cleaning

Once the power is off and the reservoir has been drained, a simple cleaning process should be followed:

WARNING

The cooking chamber is designed to retain heat. It may still be hot to the touch when cleaning. Wear protective gloves or wait for the surface to cool before cleaning. Do not add cold water to a hot, empty cooking chamber until it has cooled down, or damage may result.

1. Lift the pan racks up and off mounting screws, then remove from the steamer for cleaning.
2. Lift reservoir cover out of cooking chamber compartment, clean cover.
3. Using a soft sponge, clean the interior of the cooking chamber.
4. Clean the door gasket with gentle soap and water and allow to air dry.

NOTICE

Only use mild soap, white vinegar, and water to clean your steamer. Do not use abrasive utensils, caustic cleaners, or products containing chlorine, lye, or phosphorus (such as Lime-A-Way). After cleaning, rinse thoroughly by wiping with a wet cloth dampened with fresh water. Never spray water on your steamer.

FAILURE TO FOLLOW PROPER INSTRUCTIONS MAY CAUSE AN UNSAFE CONDITION AND/OR DAMAGE YOUR STEAMER AND WILL VOID YOUR WARRANTY.

5. Rinse the cooking chamber and door area with clean water. Rinse the cavity.
6. Wipe with a clean towel or soft sponge.
7. To remove the white mineral deposits at and below the water line, spray white vinegar directly on the mineral build-up using a spray bottle. For heavy mineral deposits, replace drain/overflow pipe, pour two cups of white vinegar in the water reservoir and turn on steamer to add enough water to cover the white minerals, let soak for half an hour or overnight. Loosen mineral deposits with a nylon bristled brush. Drain, wipe and rinse. Use water and white vinegar to clean reservoir.
8. Make sure stainless probe on lower backside of cooking chamber interior is clean.

NOTICE

It is always advisable to leave the steamer door open when the unit is shut down for the evening. This will extend the life of your gasket.

NOTICE

It is normal for the white lime to collect at the water line and in the reservoir area. Liming is easily removed with daily cleaning – white vinegar is very effective and will not damage the cooking chamber. Use only white vinegar and water to clean reservoir on a daily basis.

Your steamer is now ready for another day's work!

Weekly Cleaning

In addition to the daily cleaning, it is necessary to clean the air intake on a weekly basis. Air intake provides necessary cooling air to the internal components. They are generally located on the sides of the equipment.

Monthly Cleaning

It is recommended that your steamer be descaled once a month or as needed.

Descaling Procedure

1. Remove reservoir cover and pan support racks.
2. Fill the cavity with water.
3. Spread one scoop of QuickClean (1 oz) evenly to the water.
4. Allow 8 to 16 hours to clean.
5. Drain, rinse and wipe the bottom of the cavity.

QuickClean is a safe and efficient way to maintain a scale-free environment for your steamer. Monthly descaling will enhance the life of your steamer. Scale build up can damage your steamer and expose you to costly repairs. Failure or malfunction of this appliance due to scale build up is not covered under warranty. Read and follow instructions on the QuickClean bottle.

To order QuickClean or if you have questions about this product call 480-591-4073.

TROUBLESHOOTING

WATER OVERFLOWS INTO COOKING COMPARTMENT

When steamer is first turned on for the day, and the following conditions occur:

- READY light does not come on after about 5 minutes,
- Water begins to overflow into cooking compartment,
- Water fill solenoid valve is open,

Any or all these symptoms may indicate a problem with the operating probe due to either:

1. Probes not sensing water, thereby not operating fill solenoid.
2. Excessive scale build-up on the operating probe. This acts as an “insulation” and prevents the probe from sensing the water level. It is therefore unable to close the water fill (solenoid) valve to shut off the water.

As a temporary solution, with power OFF, unscrew probes, check visually, and clean or chip off scalant. Replace probe.

This problem is an indication of severe harmful water conditions which should be corrected immediately to avoid damage to the components and ultimate malfunction of the steamer. (See WATER QUALITY in this manual).

HEATER ELEMENTS DO NOT COME ON

When the steamer is turned ON and heater elements do not activate, and the READY light does not come on, then the contactors may be burned out. If a considerable amount of “chattering” of contactors has been previously experienced, then the thermostat bulb may be coated with scalant and unable to sense water temperature in the boiler accurately, and therefore unable to control the contactors.

1. Replace contactors.
2. Unscrew thermostat bulb, clean off scalants and screw thermostat bulb back in.

This problem may be an indication of inadequate water quality and is not covered under warranty. Have water quality analyzed and corrected immediately to avoid complete malfunction of the steamer.

CSE-4 & CSE-6

Electric Convection Steamer



A product with the Crown name incorporates the best in durability and low maintenance. We all recognize, however, that replacement parts and occasional professional service may be necessary to extend the useful life of this appliance. When service is needed, contact a Crown Authorized Service Agency, or your dealer. To avoid confusion, always refer to the model number, serial number, and type of your appliance.



CROWN FOOD SERVICE EQUIPMENT

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